

# **Appendix 8B-1a: Non-ECP Water Quality Sampling Sites, Monitoring Schedule and Flow Volumes**

**Table 1.** Water Quality Monitoring Schedule for Non-ECP Discharge Structures and Additional Upstream Monitoring Locations.

AREA	Non-ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	WATER QUALITY MONITORING SCHEDULE						WATER QUALITY COMMENTS	
			Physical	Nutrients	Major Ions	Trace Metals	Pesticides Water	Pesticides Sediment		
INTO	ACME1DS	ACME1DS	BWF/M	BWF/M	QTR	SA	QTR	SA		
	ACME1 + (Upstream of ACME1DS)	VOW1		Weekly Flowing (autosampler)					Sampling conducted by Village of Wellington. TP collected by autosampler.	
	G-94D	G94D	BWF/M	BWF/M	QTR	SA	QTR	SA		
	ACME2 + (Upstream of G94D)	VOW2		Weekly Flowing (autosampler)					Sampling conducted by Village of Wellington. TP collected by autosampler.	
	G-123	G123	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-9	S9	BWF/M	Weekly Flowing (autosampler)	QTR	SA	QTR	SA	TP collected by autosampler.	
	S-9A	S-9A	BWF/M	BWF/M except TP-WF/M Grab	QTR				New Station, no data available yet	
	S-14	S14	BWF	BWF	QTRF	SAF				
	S-18C	S18C	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-140	S140	BWF/M	BWF/M	QTR	SA	QTR	SA	TP collected by autosampler, nitrogen species collected by Grab	
	S-175	S175	BWF/M	BWF/M	QTR	SA				
	S-190	S190	BWF/M	BWF/M	QTR	SA	QTR	SA	TP collected by autosampler, nitrogen species collected by Grab	
	S-332	S332	BWF/M	BWF/M	QTR	SA	QTR	SA		
	NSID (S38B)	NSIDSP01	BWF	BWF	QTRF	SAF	QTRF	SAF		
NSID (S38B)	S38B	BWF	BWF	QTRF	SAF	QTRF	SAF			
WITHIN	G-64	G64	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *	
	G-69	G69	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *	
	G-71, S-346, S-347	S12D	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
	S-10E	S10E	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
	S-141	S34	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
	S-142	S142	BWF/M	BWF/M	QTR *		QTRF	SAF	Monitoring Fe, Mg, Ca phased out *	
	S-143	S11A	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
	S-144	S144							Discontinued sampling in favor of surrogate location at S-145 *	
	S-145	S145	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
	S-146	S146							Discontinued sampling in favor of surrogate location at S-145 *	
	S-151	S151	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
	S-339, S-340	C123SR84	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
	FROM	G-94A, G-94B, G-94C	G94B	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
		S-31	S31	BWF/M	BWF/M	QTR *		QTR	SA	Monitoring Fe, Mg, Ca phased out *
S-34		S34	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
S-38		S38	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
S-39		S39	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
S-197		S197	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *	
S-333		S333	BWF/M	BWF/M	QTR	SA				
S-334		S334	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
S-337		S31	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
S-343A, S-343B		US41-25	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *	
S-344		S344	QTR	QTR	QTR *				Monitoring Fe, Mg, Ca phased out *	
C-111 BASIN	S-174 +	S176	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-177 +	S177	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-178 +	S178	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-331 +, S-173 +	S331-173	BWF/M	BWF/M	QTR	SA			S173 is not listed in Permit, but is adjacent to and flows in same direction as S331	
	S-332D	S332D		Weekly (autosampler & Grab) and only TP					S-332D is not listed in Permit, but it needs to provide information	

Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different representative sampling location  
 2) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations  
 3) \* indicates monitoring requirement eliminated in the November, 1999 Non-ECP Permit Modification  
 4) Table Legend:

BWF/M = Biweekly if Flowing/Otherwise Monthly  
 BWF = Biweekly if Flowing  
 QTR = Quarterly  
 QTRF = Quarterly if Flowing  
 SA = Semiannually  
 SAF = Semiannually if Flowing  
 1 WS - 1 DS = 1 Wet Season and 1 Dry Season

**Table 2.** Flow volume and annual flow weighted mean TP concentrations for Non-ECP structures during WY2002 (May 1, 2001 through April 30, 2002)

AREA	NON ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	FLOW		Monthly Flow Volumes (acre-ft) (May 1, 2001 - April 30, 2002)												Total Flow Volume (acre-ft)	Annual Flow Weighted Mean TP (ppb)	
			STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr			
INTO	ACME1DS	ACME1DS	n/a	n/a	See flow data from ACME 1												n/a	95	
	ACME1 + (Upstream of ACME1DS)	VOW1	ACME1	15022	3	2,188	5,086	2,575	5,075	2,575	1,168	479	109	1,094	140	0	20,492	86	
	G-94D	G94D	n/a	n/a	See flow data from ACME 2												n/a	118	
	ACME2 + (Upstream of G94D)	VOW2	ACME2	15023	5	2,661	4,998	3,116	5,474	2,728	1,195	566	107	1,221	151	0	22,222	152	
	G-123	G123	G123_P	K5481	12,712	17,990	13,563	4,844	2,701	238	0	0	0	0	0	0	52,047	16	
	S-9	S9	S9_P	K5483	24,122	24,676	34,086	43,728	40,030	36,675	20,665	14,348	15,232	15,101	10,850	4,104	283,618	19	
	S-9A	S-9A	S-9A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	S-14	S14	S14_C	K5485	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF
	S-18C	S18C	S18C_S	15760	1,089	4,010	19,681	30,142	29,359	39,720	21,084	15,019	9,683	2,345	495	209	172,835	7	
	S-140	S140	S140_TOT	06754	0	6,398	14,749	15,068	21,385	23,298	11,232	4,606	4,130	4,970	4,159	0	109,994	48	
	S-175	S175	S175_C	15752	0	0	0	0	2	3	0	0	0	0	0	0	6	5	
	S-190	S190	S190_S	K5501	0	1,631	8,875	6,732	29,781	27,469	6,149	473	453	2,840	571	9	84,982	89	
	S-332	S332	S332_P	15753	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NPF
	NSID (S38B)	NSIDSP01	NSPRNG_C2	15121	0	0	0	755	1,307	294	138	0	0	0	0	0	2,494	26	
NSID (S38B)	S38B	NSPRNG_C2	15121	0	0	0	755	1,307	294	138	0	0	0	0	0	2,494	16		
WITHIN	G-64	G64	G64_C	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	G-69	G69	G69_C	K5480	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF	
	G-71, S-346, S-347	S12D	S12D_S	FE774	0	666	736	21,585	31,816	55,689	58,811	29,310	10,635	4,735	6,061	5,288	225,330	12	
	S-10E	S10E	S10E_C	K5484	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF	
	S-141	S34	S141_W	K5493	0	0	0	-1,457	-1,457	-2,418	213	113	0	0	0	0	-5,007	21	
	S-142	S142	S142_C	K5494	-6,917	-7,695	-7,840	-1,972	-1,057	1,355	5,002	6,286	0	0	0	0	-12,838	18	
	S-143	S11A	S143_C	K5495	0	0	0	0	0	4,424	21,226	0	0	3,135	16,056	1,829	46,670	21	
	S-144	S144	S144_C	K5497	0	0	2,680	6,869	0	6,102	940	5,258	2,734	2,110	3,329	0	30,022	9	
	S-145	S145	S145_C	K5498	0	0	3,201	8,043	0	6,833	1,066	6,319	4,074	3,142	5,053	0	37,731	10	
	S-146	S146	S146_C	K5499	0	0	2,317	6,751	0	5,728	816	3,879	30	1,207	2,039	0	22,766	8	
	S-151	S151	S151_C	K5500	5,338	0	0	16,269	15,447	12,545	12,926	35,993	0	26,391	52,154	12,240	189,305	25	
	S-333	S333	S333_S	15042	0	1,135	270	73,013	14,089	0	0	37,841	15,082	29,585	62,106	16,880	250,001	19	
	S-339	C123SR84	S339_S	K5506	31,288	338	735	446	1,096	1,364	726	560	937	1,266	1,125	494	40,375	68	
	S-340	C123SR84	S340_S	K5507	22,268	1,076	1,053	558	591	493	450	577	568	615	972	1,185	30,404	65	

Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location  
 2) n/a indicates that flow and/or stage data is Not Available, or that structure is not appropriately instrumented to capture information.  
 3) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations  
 4) ACME1DS and G-94D are not instrumented for flow calculation. Flow-weighted mean TP concentration was determined by considering the TP data from these sites with the flow data from the upstream pump stations (ACME 1 and ACME 2, respectively)  
 5) G-123 structure is not monitored for flow (reported volume is an estimate). Arithmetic Mean TP was calculated by considering all samples collected.  
 6) S-14 is not instrumented for flow calculation, However operational records indicate no operation during the water year.  
 7) NPF indicates either structure closed or that no positive flow was recorded on sampling days, thus a flow-weighted mean could not be calculated

**Table 2.** (Continued) Flow volume and annual flow weighted mean TP concentrations for Non-ECP structures during WY2002 (May 1, 2001 through April 30, 2002)

AREA	NON ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	FLOW		Monthly Flow Volumes (acre-ft) (May 1, 2000 - April 30, 2001)												Total Flow Volume (acre-ft)	Annual Flow Weighted Mean TP (ppb)	
			STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr			
FROM	G-94A	G94B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	G-94B	G94B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	G-94C	G94B	G94C_C	MW385	0	0	0	0	0	0	8,336	12,841	44	18	25	1	21,267	23	
	S-31	S31	S31_C	06786	0	0	0	0	0	0	2,473	6,726	0	559	12,863	4,106	26,728	26	
	S-34	S34	S34_C	15954	0	0	0	0	0	4,300	26,876	8,481	93	12,372	16,353	1,211	69,686	33	
	S-38	S38	S38_C	K5488	1	0	0	0	0	0	142	0	0	0	0	0	0	144	7
	S-39	S39	S39_S	K5489	21	204	0	360	0	9,416	30,761	3,476	7,264	19,704	19,912	12,015	103,132	27	
	S-197	S197	S197_C	15763	0	0	0	4,934	2,409	13,476	0	0	0	0	0	0	0	20,818	10
	S-334	S334	S334_S	FB752	0	0	0	0	849	0	0	10,211	1,787	246	17,294	2,549	32,937	14	
	S-337	S31	S337_C	K5505	12,349	0	0	0	0	0	0	0	0	0	0	0	0	12,349	23
	S-343A	US41-25	S343A_C	K5508	1	0	0	2,838	3,943	5,044	74	0	0	0	0	0	0	11,899	11
	S-343B	US41-25	S343B_C	K5509	104	0	0	3095	4221	5375	89	0	0	0	0	0	0	12884	12
	S-344	S344	S344_C	16199	0	0	0	1,632	3,314	4,187	342	0	0	0	0	0	0	9,475	12
C-111 BASIN	S-174 +	S176	S174_S	12289	-78	0	214	0	0	0	-8	0	258	3,427	4,906	5,157	13,876	8	
	S-177 +	S177	S177_S	13156	449	1,970	10,476	20,618	20,782	28,740	16,565	12,920	5,139	0	0	0	117,658	13	
	S-178 +	S178	S178_C	03952	0	0	0	0	2,652	1,746	1	0	0	0	0	0	4,398	93	
	S-331 +	S331-173	S331_P	15722	5	560	4,059	8,362	17,826	30,027	43,802	45,896	14,311	566	14	7	165,437	6	
	S-173 +	S331-173	S173_C	15830	1,989	68	3,470	1,144	901	228	9	0	3,234	5,497	7,489	7,095	31,124	10	
	S-332D +	S-332D	S-332D	MS947	0	740	13,430	16,963	25,074	32,227	26,326	19,332	10,008	22	2	0	144,124	5	

- Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location  
2) n/a indicates that flow and/or stage data is Not Available, or that structure is not appropriately instrumented to capture information.  
3) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations  
4) G-94A, G-94B, G-94C are not instrumented for flow calculations. Estimate provided for March 2001 when G-94C backflowed into WCA-1.  
5) S-331 and S-173 flow records were combined to determine the annual flow weighted mean TP  
6) NPF indicates either structure closed or that no positive flow was recorded on sampling days, thus a flow-weighted mean could not be calculated